

## ABSTRACT

The Reusable Plastic Bottling System is Designed to save both energy and consumer costs. By refilling Plastic Detergent Bottles at the supermarkets recycling costs can be reduced significantly.

The system is also designed to reduce the amount of labeling on the bottles. Fifty five or thirty gallon drums will be placed on aluminum or steel alloy racks. The drums will be installed with faucet or electric top fill valves so the consumer can easily open the valve to refill their bottles. Drum racks can be mounted to the floor with red head anchors. The rack system can easily be designed to fit in the current supermarket rack area. The rack system with drums is arranged for efficiency. Drums will need to be refilled with detergent at least twice per week in most supermarkets. This estimate is based on weekly usage (Albertsons Supermarket, Costa Mesa, CA store mgr. Mike Maurer). The main objective for replacing plastic detergent bottles with a reusable drum system is to save recycling and virgin resin energy costs. This system is not designed to replace other types of bottle recycling.